

REMARKS

Status of claims:

Claims 1-25 have been cancelled, and new claims 26-39 are presented herein.

Section 103 Rejections:

Claims 15-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Keller, (US 5,129,824) in view of Hill, (US 5,993,784) and Aberg et al., (US 5,807,541) as evidence by Miller (US 5,123,841). In view of the cancellation of these claims, this rejection is now moot.

Applicant further submits that this rejection would not be appropriate for new claims 26-39 for the following reasons:

Keller teaches what is called a "self-treatment method" – but is in fact, something beyond the ability of ordinary people to perform. See for example, Col. 3, line 4-20:

The medicament is preferably forcibly delivered directly to the infected site by flossing, brushing, or injection through the use of tufted floss, an interdental brush or syringe, respectively, or by hydrostatic or mastication pressure through the use of a tray appliance or the like. Preferably, the flossing or brushing application is carried out using a piece of floss or an interdental toothbrush which carries a supply of the medicament. The floss preferably has tufted section which enhances the carrying capability of the floss. The application of medicament by floss or interdental toothbrush may be supplemented by application of the medication in a flexible tray appliance molded of a suitable synthetic resin material or elastomeric material to conform to the patient's teeth so as to fit closely on the teeth and supporting structure.

While flossing and brushing are both “self administration” techniques, injection of a medicament such as tetracycline into various areas of gum tissue in the mouth (upper, lower, inside and outside, front and back) – by the person having gingival detachment – is neither routine nor ordinary self-treatment – regardless of what the Keller patent claims.

Also, Keller teaches only the delivery of medicine (antimicrobial or antibiotics) to the area to be treated, and nothing more. None of Keller’s techniques deliver soft abrasives for the physical (or “mechanical”) removal of biofilms from the three tooth surfaces claimed herein.

To partly supplement the teachings of Keller, the Examiner has cited the Hill patent. However, these teachings are not as compatible as suggested by the Examiner.

Hill provides a toothbrush with 3-5 ribs and grooves, and uses that with toothpaste containing soft abrasives. The use of the Hill toothpaste would likely interfere with the use of Keller’s medicines (antimicrobials or antibiotics), effectively removing them from the area to be treated. Keller uses his delivery devices (floss, brush, syringe, and tray) always with the same goal – the delivery of antimicrobials or antibiotics, not the mechanical/physical removal of biofilms as claimed herein. Hill teaches one technique for removal of biofilms from one of the tooth surfaces claimed herein, but does not teach or suggest the entire scope of the claims presented herein.

To further supplement the teachings of Keller, the Examiner has cited the Aberg patent. Again, these teachings are not as compatible as suggested by the Examiner.

Aberg et al teach preventing dental caries by use of a fluoride containing toothpaste, which further includes a medicament such as NSAIDs for treating periodontal disease – caused by the fluoride (see Col. 1, lines 45-50):

The present invention is a method for preventing dental caries by administering a fluoride salt into the oral cavity while at the same time controlling periodontal bone loss by administering, in addition to the fluoride salt, an amount of an NSAID sufficient to inhibit the production of prostaglandins induced by the fluoride.

Nothing in Aberg teaches or suggests the physical/mechanical removal of biofilms from the three tooth surfaces claimed herein.

Finally, the Examiner has cited the Miller patent to provide support for the claimed pocket depth of the gingival detachment claimed herein. Nothing in Miller overcomes the other deficiencies of the cited prior art. Miller simply teaches an electric proxy brush device.

Applicant submits that due to the differences between the teachings of the proposed combinations of the cited prior art and the presently claimed method, the art, when considered as a whole, fails to make the presently claimed method obvious. Thus, the previous Section 103 rejection should not be applied to the new claims.

FEE AUTHORIZATION

Please charge any fees due in connection with this filing to Deposit Account No. 19-0733.

Respectfully submitted,
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